

By Express Mail # EV514454685US · July 14, 2005

In the Specification:

On amended page 1, delete the title -- Description --

Amended page 1, before line 6, the paragraph beginning with "The invention" insert the following titles and paragraph:

-- CROSS-REFERENCE TO RELATED APPLICATION

This is a U.S. national stage of application No. PCT/EP2004/050980, filed on 1 June 2004. Priority is claimed on the following application(s): Country: Germany, Application No.: 103 29 512.7, Filed: 30 June 2003.

BACKGROUND OF THE INVENTION --

Please replace the paragraph beginning on amended page 1, line 11, with the following amended paragraph:

-- For safety reasons, monitoring systems are frequently used for electronic devices in which an incorrect output variable which is caused by a fault in the device can bring about hazards. It is therefore necessary to avoid faults in sensor circuits for motor vehicles resulting in hazardous driving situations, for example if a rotational speed sensor signals a high rotational rate while the vehicle is maintaining its course. However, other hazards and at least operational faults may occur as a result of incorrect messages. Causes of incorrect Incorrect messages may be caused, for example, by brief disruptions, in particular voltage peaks, which

By Express Mail # EV514454685US · July 14, 2005

are interpreted by monitoring systems as faults without them leading to falsification of the output variable of the device. --

Please replace the paragraph beginning on amended page 1, line 26, with the following amended paragraph:

-- In a method and a device for handling suspected faults according to U.S. Patent Application Publication 2004/090323 WO/039929 A1, there is therefore provision for a counter to be incremented, with different measures being taken when different threshold values are exceeded. When a suspected fault does not occur, the counter can be set to zero or decremented. --

Amended page 2, before line 7, the paragraph beginning with "The object of", insert the following title:

-- **SUMMARY OF THE INVENTION** --

Please replace the paragraph beginning on amended page 2, line 7, with the following amended paragraph:

-- The An object of the present invention is to largely prevent incorrect messages so that as far as possible only genuine faults lead to an alarm, which is then indicated or can be fed to a superordinate system ~~in order~~ to ignore the output variable, and ~~in order~~ to ensure that an alarm is triggered quickly when there are a plurality of input variables. --

Please replace the paragraph beginning on amended page 2, line 14, with the following amended paragraph:

-- This object is achieved according to the invention in that fault messages are derived using a program running on a processor if one of the input variables to be monitored exceeds respective limiting values which are predefined for it, in that ~~the a~~ respective counter is incremented by the fault messages, in that the counter reading is checked to determine whether at least one fault message is present, and in that, if this is the case, a further check is carried out in advance for the relevant input variable, in that the fault messages each increment a counter, and in that an alarm is not triggered until a predefined counter reading is reached. --

Please replace the paragraph beginning on amended page 2, line 32, with the following amended paragraph:

-- ~~By means of one development of the method in which there is provision for the~~ The size of the increments and, if appropriate, of the decrements and the predefined counter reading ~~to~~ may be preselectable, and the triggering of an alarm can be adapted individually to the type of respective fault message. This ~~development~~ particular embodiment is preferably implemented by the preselectable variables being read out from a nonvolatile memory when the device is switched on. --

By Express Mail # EV514454685US · July 14, 2005

Please replace the paragraph beginning on amended page 3, line 25, with the following amended paragraph:

--The invention also comprises an arrangement for suppressing fault messages in monitoring systems for electronic devices, in particular for sensor circuits for motor vehicles, in which it is provided that in a microprocessor it is possible to run a program with which fault messages are derived if one of the input variables to be monitored exceeds respective limiting values which are predefined for it, ~~and in that the.~~ A respective counter is incremented by the fault messages, ~~in that the.~~ The counter reading is checked to determine whether at least one fault message is present, and in that, if this is the case, further checking is carried out in advance for the relevant input variable, ~~and in that an.~~ An alarm is not triggered until at least one of the counters reaches a respectively predefined counter reading. --

Page 4, before line 1, the paragraph beginning with "The invention permits", insert the following title:

-- **BRIEF DESCRIPTION OF THE DRAWINGS** --

Page 4, before line 13, the paragraph beginning with "For the sake", insert the following title:

-- **DETAILED DESCRIPTION OF THE PRESENTLY PREFERRED EMBODIMENTS** --

By Express Mail # EV514454685US · July 14, 2005

Please replace the paragraph beginning on page 4, line 1, with the following amended paragraph:

-- The invention permits numerous embodiments. One of these is illustrated schematically in the drawing by means of a plurality of figures, and described below. In the drawing:

figure 1 is a block diagram of the exemplary embodiment,

~~figure 2~~ figures 2a, 2b, and 2c are comprises time diagrams for various signals in the block diagram illustrated in fig. 1, and

figure 3 is a flowchart of a program which executes the method according to the invention. --

Please replace the paragraph beginning on page 4, line 13, with the following amended paragraph:

-- For the sake of simplicity, the arrangement according to figure 1 is illustrated only for an input variable which is to be monitored and which is present at an input 1. At first, checking is carried out at range check 2 to determine whether the input variable is in a permissible range between min and max. If this is not the case, a fault message is passed on to a fault counter 3, also simply referred to below as counter. If a fault message is present, the counter 3 is incremented by one increment I which is predefined as a number of counting steps. If no fault message is present in the respective time period (program run), the counter 3 is decremented by one decrement D which is also predefined as a number of counter steps. If the counter reading reaches a predefined threshold value A, an alarm is triggered in an alarm

By Express Mail # EV514454685US · July 14, 2005

trigger 4 and output via an output 5. The respective counter reading can be read out via a monitoring output 6. --

Please replace the paragraph beginning on page 5, line 11, with the following amended paragraph:

-- ~~By means of the threshold~~ Threshold values it is possible may be used to suppress the alarm in a selective way when specific input variables to be monitored ~~are exceeded~~ exceed allowable values, ~~in that the~~ The threshold value is may be set to "0" for these input variables. This specification of a threshold value is interpreted as a command with which the correspondingly configured alarm triggers are blocked. The fault counter for checking these input variables thus has no effect ~~any more~~ on the triggering of the alarm. --

Please replace the paragraph beginning on page 5, line 20, with the following amended paragraph:

-- Figure 2a shows an exemplary profile of the output variable of the range ~~ckecking~~ check 2 in line a. As an example it will be assumed that after a fault-free time a fault message 11 occurs and then in turn a time period without faults and then two fault messages 12, 13 in succession. --

By Express Mail # EV514454685US · July 14, 2005

Please replace the paragraph beginning on page 5, line 26, with the following amended paragraph:

-- Line b of Figure 2b shows the profile of ~~the counter~~ a reading of error counter 3 for the case in which in each case a fault message 11, 12, 13 increments the counter by an increment I of one a counting step, and in which the absence of a faults message decrements decrementation is set to the counter 3 by D=0 in the case of the absence of a fault message. With this setting, no fault messages are therefore “forgotten” again so that the absolute number of fault messages remains stored in the error counter 3 until the next reset (switching on of the device or switching off). If the threshold value is therefore set to 3 in the case illustrated in figure 2b, an alarm is triggered on the basis of the fault message 13 because the counter reaches the value of 3 after the fault message 13 occurs. --

Please replace the paragraph beginning on page 6, line 4, with the following amended paragraph:

-- Figure 2c relates in turn to the occurrence of fault messages 11, 12, 13 according to figure 2a, but I is set to 3 and D to 1. As a result of fault messages 11, 12, 13 occurring in close succession, the counter reading quickly rises, and when fault messages are absent it drops more slowly. As a result, accumulations of fault messages lead to an alarm if the threshold value A is set higher than D I. --

Page 8, amend the title as follows: -- Patent Claims What is claimed is: --